The Medical Information Sciences Program of Amsterdam

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Abstract

The medical information sciences program of Amsterdam has been in existence for 15 years now. Starting in 1987, the program has been modified several times. Now a full-fledged 4 years master program exists. Students are taught skills to adequately and systematically apply information and communication technologies in order to optimize health care information processing. The program is offered within the Faculty of Medicine of the University of Amsterdam. The structure and contents of the current program will be described.

Program structure

The specialized university master program of medical information sciences at the University of Amsterdam has evolved from a 'postmaster course' for medical doctors into a 4 years master course for high school graduates. The program covers four main study domains: Medical Biology, Health Care and Clinical Medicine, Information Technology and Information and Methodology.

Program contents

The program courses are summarized in the figure below.
The first year of study includes courses in (clinical) medicine, informatics, mathematics and medical informatics and provides a solid theoretical basis for the next three years of study. The courses in the second year focus on a further integration of computer science with medicine and vice versa. In all courses, real-life clinical cases are used to explain basic informatics concepts and design methodology. For example, software engineering theory is linked with an internship and a software engineering project with one of the clinical partners within the academic hospital. The third year includes courses with an even stronger medical informatics signature such as 'Artificial Intelligence' and 'Signal and Image Processing'. All 3rd year students attend an international course on Strategic Information Management, offered by four European universities. Internships, seminars on medical informatics topics, Inter Disciplinary Practicals (IDP) and problem-based learning are used together with lectures and working groups. Finally, students are mainly occupied with a 33-week research traineeship in the last year.

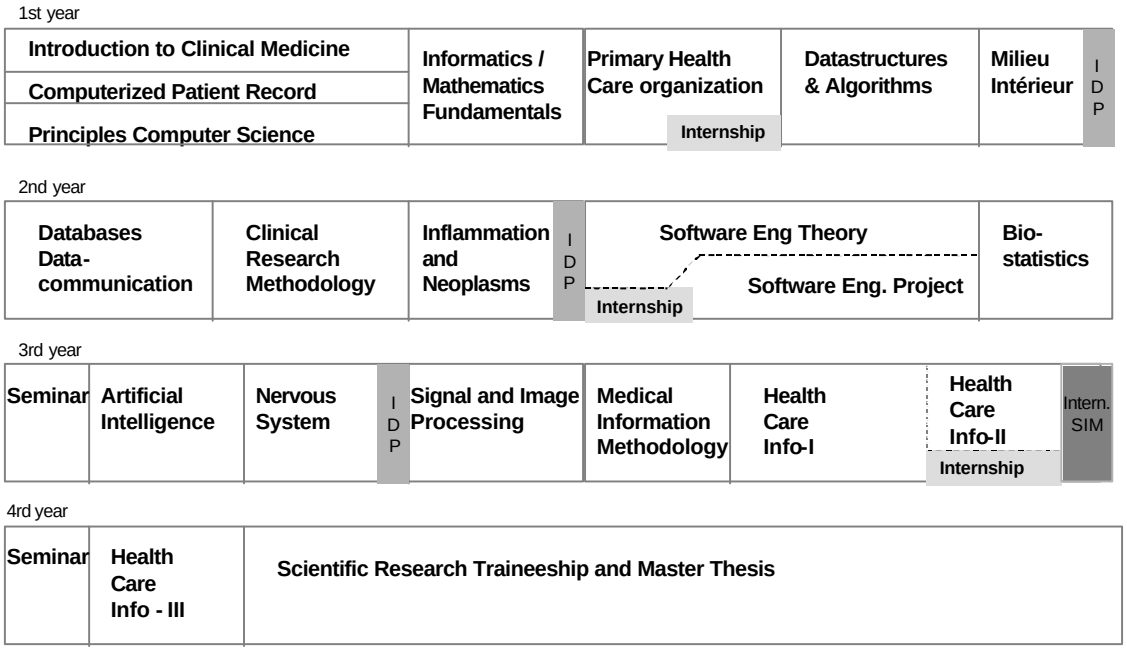

Figure 1: Overview of the structure and contents of the Master program Medical Informatics